# Request to Archive
# With The National Centers for Environmental Information
# For Total Ozone Analysis (TOAST)
# Provided by OSPO

## 2014-06-12

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

**1. Who is the primary point of contact for this request?**

Vaishali Kapoor
OSPO
Physical Scientist
+1 301-683-3246
vaishali.kapoor@noaa.gov

**2. Name the organization or group responsible for creating the dataset.**

OSPO/SPSD

**3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.**

The TOAST system takes total and profile ozone retrievals, as well as some other information, from the daily PMF to conduct the objective analysis. One of the resulted analysis fields, the SBUV/2 middle-to-upper stratospheric layer ozone (MSUS), is then combined with the TOVS upper tropospheric and lower stratospheric layer ozone (UTLS) to form the TOAST total ozone product.

The TOAST system has three types of output files: direct access binary data, GRIB format data and Portable Network Graphics (PNG) images. Since it is feasible to make runs using multiple SBUV satellite inputs, in all instances below the Nxx specifier in the name may be repeated (when using multiple SBUVs). (Ex. If SBUV satellites 16 and 19 were used, the Nxx term would become NxxNxx and would be replaced with N16N19 in the filenames). This exception is only valid with SBUV files and a maximum of three satellites can be used during a run. For TOVS it is feasible to use either NOAA or METOP source data as inputs, in all instances below the [Nyy,My] specifier in the name would be replaced with either N19 or M2 or M1.All output data described in this section are direct access binary files with record length of 260640 bytes, which represent a (360, 181) array of 4-byte floating point values. Each record holds a 2-D global 1°×1° gridded analysis. The first data value in a record is for the point centered at (0.5°E, 90°S).

**4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)**

From 2014-08-20
Ongoing as continuous updates to the data record

**5. Edition or version number(s) of the dataset:**

none

**6. Describe the level to which the data are processed. For example, are these unprocessed raw observations, derived parameters, quality controlled or inter-calibrated data, etc.?**

derived parameters

**7. Approximate date when the dataset was or will be released to the public:**
2014-08-20

**8. Who are the expected users of the archived data? How will the archived data be used?**
NCEP/CPC, NOAA Vis Lab, EC, WMO, NASA and others involved in monitoring ozone hole and/or total ozone trends.
NASA Ocean Biology, NESDIS MODIS data processing and others who require total ozone fields (radiative transfer input)
NWS Air Quality community
Webpage accessed by >400 unique users per mon

**9. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?**
STAR has validated the products.

**10. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?**
none

**11. List the input datasets and ancillary information used to produce the data.**
NUCAPS (netcdf) 30 mins granules
IMOPO(hdf)
gonopo(hdf)

**12. List web pages and other links that provide information on the data.**
not applicable

**13. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.**
1. Interface Control Document - TOAST ICD v3.1_052413mg_joc.doc
   Internal Users Manual - TOAST IUM V3.1_052913mg_joc.doc
   System Description Document - TOAST SDD V3.1_052913mg_joc.doc
   System Maintenance Manual - TOAST SMM V3.1_052913mgJOC.doc

**14. Indicate the data file format(s).**
1. PNG
2. binary

**15. Are the data files compressed?**
No

**16. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).**
nh_cris_NPP_20140421_FTLS
sh_analysisfile_cris_NPP_20140421
sh_analysisfile_cris_NPP_20140421_FTLS
global_crisftls_NPP_20140421

global_cris_NPP_20140421
sh_analysisfile_sbuv_N19_20140421
nh_analysisfile_sbuv_N19_20140421
global_sbuvpro_N19_20140421
global_sbuvmsus_N19_20140421
global_taco_N19NPP_20140421

**17. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?**
web pages or email

**18. What is the total data volume to be submitted?**
**Continuous Data: data volume rate for a continuous data production.**

| | |
|---|---|
| Total Data Volume Rate: | 7.50MB per Day |
| Data File Frequency: | 1 per Day |
| Data Production Start: | 2014-08-20 |

**19. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.**
No additional updates, revisions or replacement data are anticipated.

**20. Describe the server that will connect to the ingest server at NCEI for submitting the data.**

| | |
|---|---|
| Physical Location: | Silver Spring, MD |
| System Name: | ESPC DDS |
| System Owner: | NESDIS OSPO/ESPC |
| Additional Information: | |

**21. What are the possible methods for submitting the data to NCEI? Select all that apply.**
1. FTP PULL
2. FTP PUSH

**22. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.**
1. User interface to order and stage data for download

**23. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?**
No known constraints apply to the data.

**24. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.**
Benefit to user
Accurate total ozone product over the globe including the polar regions
Monitor Antarctic ozone hole
Long-term global total ozone trend

NOAA Mission Goal supported:
Climate

Weather and Water

**25. Are the data archived at another facility or are there plans to do so? Please explain.**
No

**26. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?**
No

**27. Do you have a data management plan for your data?**
No

**28. Have funds been allocated to archive the data at NCEI?**
JPSS funds available for archiving

**29. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.**
N/A

**30. Is there a desired deadline for NCEI to archive and provide access to the data?**
Archive by: 2014-09-15
Accessible by:

**31. Add any other pertinent information for this request.**
None